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**TEXTURED SOUND GENERATING PANELS HAVING INCREASED  
EFFICIENCY IN CONVERTING VIBRATIONAL ENERGY TO SOUND WAVES**

**ABSTRACT**

I have discovered a way to improve the sound of musical instruments that utilize a soundboard or sound generating surface such as found in stringed musical instruments. I accomplished this by establishing a pronounced textured acoustical diffusing surface to one or more of the overall surfaces of the vibrating sound generating surface or soundboard of a stringed musical instrument creating greater surface area from which to generate greater acoustic energy. The result-compared to existing methods of improving the performance of soundboards of stringed musical instruments-is improved volume, timbre, projection, and tonality and sustain of the acoustical sounds produced by the stringed musical instrument.